

Northern California TRACON





T – Terminal

R – Radar

A – Approach

CON – Control

Northern California TRACON

- Replaces 4 aging Approach Control Facilities
- Updates and replaces outdated equipment
- Consolidates MRY, SCK, MCC, & Bay TRACONs - plus some SUU/ZOA airspace
- Raises ceiling in the airspace to 19,000.

AIRSPACE CONSOLIDATION

- OBJECTIVES
 - Balance sector traffic levels and workload
 - Utilize technological advances in automation, communications, surveillance, & navigation equipment.
 - Expand terminal functions into larger portion of airspace
 - Control holding pattern fixes

AIRSPACE CONSOLIDATION

ANTICIPATED BENEFITS

- Management of a larger volume of airspace in an integrated manner.
- Will provide framework for a comprehensive airspace redesign, thereby achieving increased efficiency.

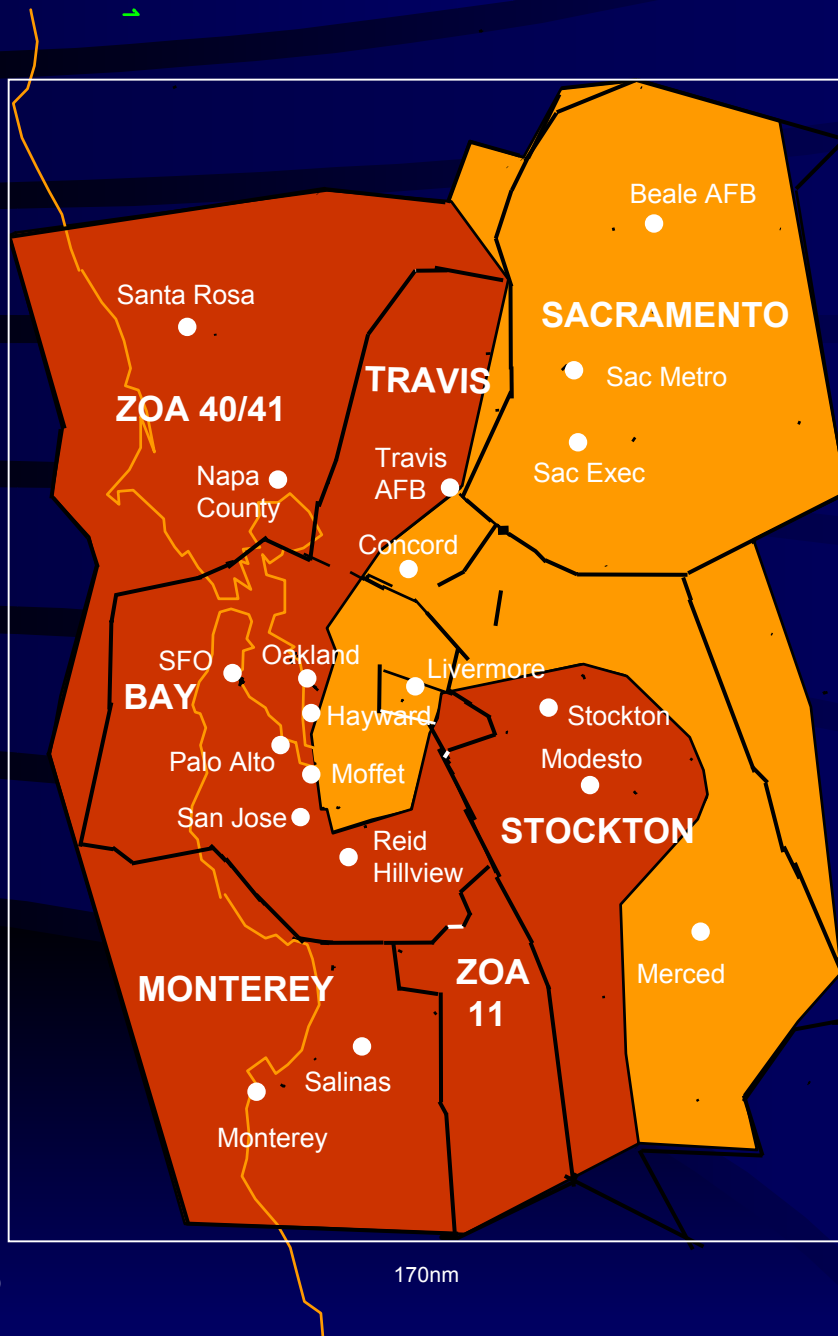
- 350 Facility Personnel when fully operational (210 Air Traffic Controllers)
- Serving 19 Airports with Towers, numerous other airports without towers
- Approximately 5500 operations daily

AIRSPACE DEFINED

- 21,000 square miles of airspace
- From:
 - Santa Rosa in the north to-
 - Big Sur in the south
- From:
 - The Pacific Coast to-
 - The Sierra Nevada Mountains

TRACON Airspace(s) within Oakland Center Airspace





KEY



**NCT AIRSPACE
19,000 AND
BELOW**



**NCT AIRSPACE
19,000 AND
BELOW**



**APPROACH
CONTROL
BOUNDARIES**

Breakdown of Airspace Responsibilities

60,000'



High Altitude
Usually above
11,000'

Air Route Traffic
Control Center
(ARTCC)

11,000'



Usually from surface to 11,000'

Terminal Radar Approach Control (TRACON)

2,500'



5NM radius from airport and up to 2,500'

Air Traffic Control Tower (ATCT)

TMU/USER GAINS

- One centralized unit to work with all 5 areas of specialization:
 - Monterey, Sacramento, and Stockton approach controls gain TMU services
 - One unit to coordinate with all involved towers
 - Streamlined flow of information from TMU to the impacted areas, thereby increasing safety and reducing delays

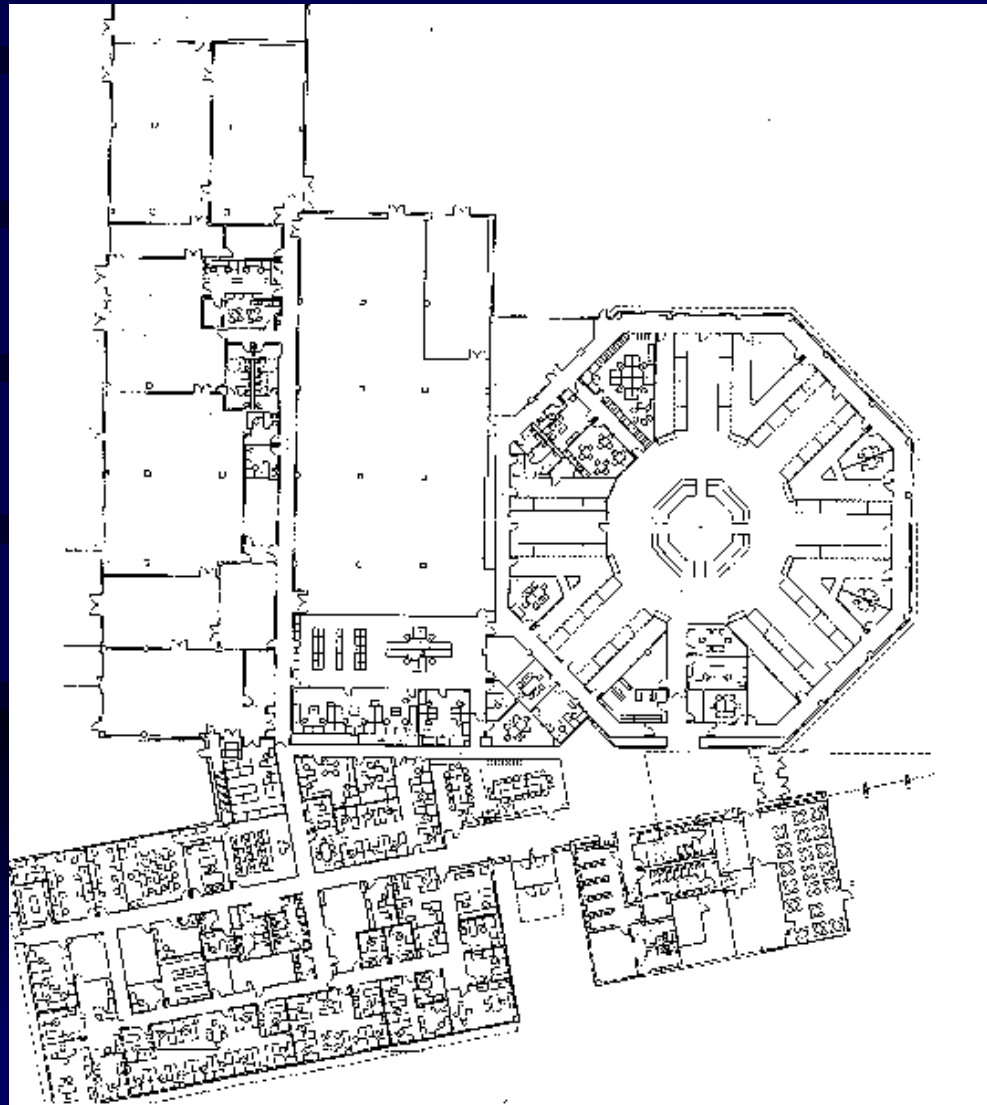
USER BENEFITS DEFINED

- More efficient use of system by exchanging enroute for terminal separation standards in NCT airspace
- Increased efficiency will be realized by centralizing Traffic Management in NCT
- More efficient use of SFO's closely spaced runways (CTAS/TMA/pFAST)

Equipment

- 10 Remote Radar Systems
- Approximately 800 Circuits
- 2 Separate Power Sources
- State-of-the-Art Data Display System and Communications System

TRACON LAYOUT







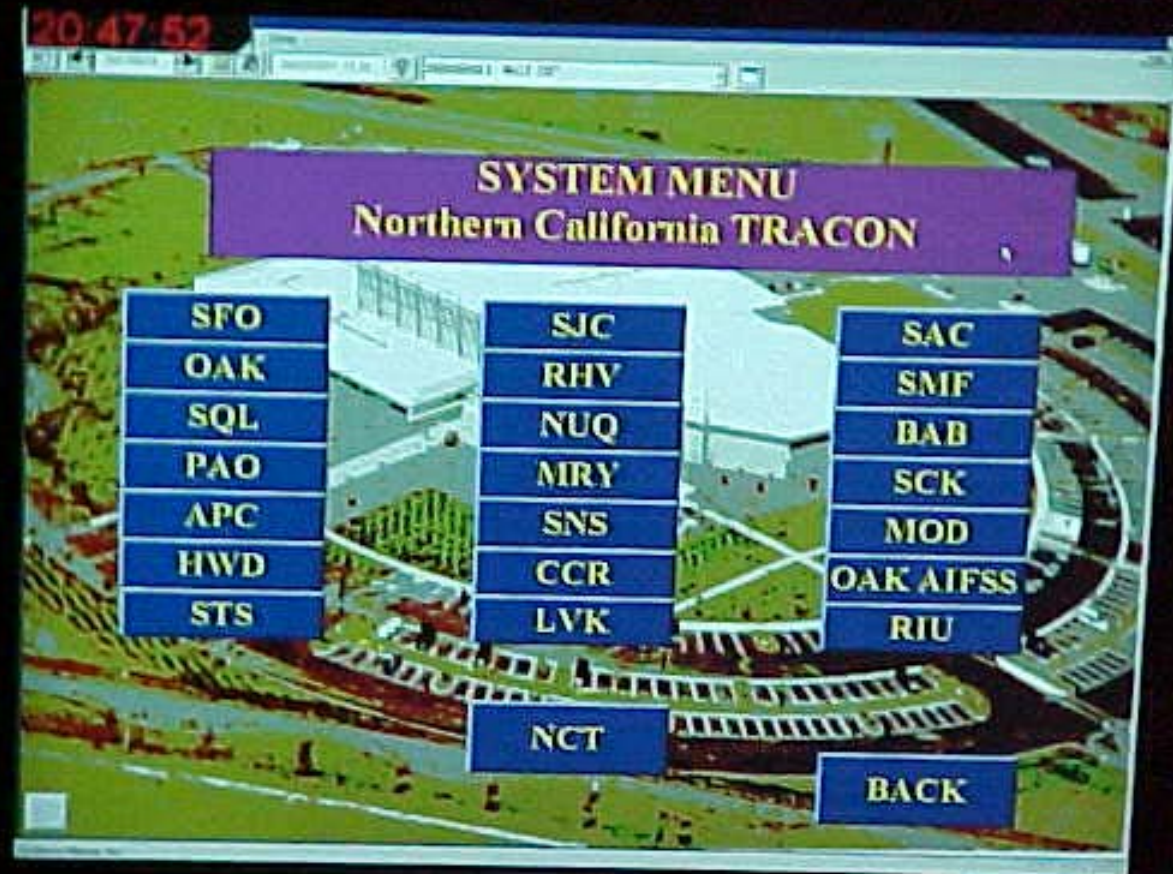
New Radar Color Display



ACE IDS 5

ASOS CONTROLLER EQUIPMENT

INFORMATION DISPLAY SYSTEM



AREA F TRAINING

TMU

SMF

A 1545Z 35010KT 10SM FEW014 BKN050 OVC080
12/10 A3013 ILS28R L28R/D01 NOTAM RY28L CLSD

SAC

*

B 0845Z 16010KT 15SM SCT001 BKN100 OVC250 13/09
A3010 ILS 29-27R FONT - 15

MHR

G 0850Z 12009KT 6SM BR OVC004 10/08 A3015
ILS30L

BAB

*

G 0845Z 00000KT 6SM BR OVC008 10/08 A3006 RY14
LOC/DME/14L

SUU

F 1545Z 00000KT 30SM CLR 12/10 A3013 RY31

SCK

F 1545Z 00000KT 30SM CLR 12/10 A3013 RY31

15 MIT to SMF from the East.

SAC acceptance rate 100+ per hour.

Central Flow requires program for MHR

SKIING OPEN AT HEAVENLY!!!!

MISC

PARACHUTE JUMPING OVER DOWNTOWN SACRAMENTO ONTO THE CAPITAL ROOF FROM 1400-1500Z.

OUTAGES

ALL RUNWAYS IN SMF ARE OTS UNTIL 1500Z.

MCC RADAR SENSOR IS OTS UNTIL 2100Z.

SMF TAXIWAY A HAS A CAR WITH A FLAT TIRE

NOTAMS

CLEAR AIR TURBULENCE AT 15000 FEET OVER MHR

SMOKE FROM FOREST FIRE UP TO FL190 FEET OVER TAHOE

SMF RVR 34L 6500 6500 6500 0 0

16R 6500 6500 6500 0 0

SCK RVR 29R 6500 0

Training AREA F TMU

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EMERGENCY

Required Information

1. Aircraft ID
2. Nature of Emergency
3. Pilot's Desires

Other Pertinent Information

HIJACK

Assistance Techniques

VFR Aircraft In Weather

Fuel Dump Broadcast

Fuel Dumping

Overdue AC Control Actions

Overdue Aircraft

Fighter Aircraft

ELTs

EOVM Usage

LOC ID

Aircraft Bomb Threats

Communication Failure

Emergency Airport

NCT Building Facts

- 95,000 SF Total Foot Print
- 16,000 SF Operations Room: includes positions, maintenance space etc.
- 12,000 SF Electronics Equip. Rm.
- 3,000 SF AF Maintenance
- 30,000 SF AF/AT Admin, Support, common usage space

The Site before..





Aerial View of NCT after!



Visitors' Entrance



Operations Wing



Cafeteria and Patio Area



View of NCT from Southeast



Lobby Area and Conference Room

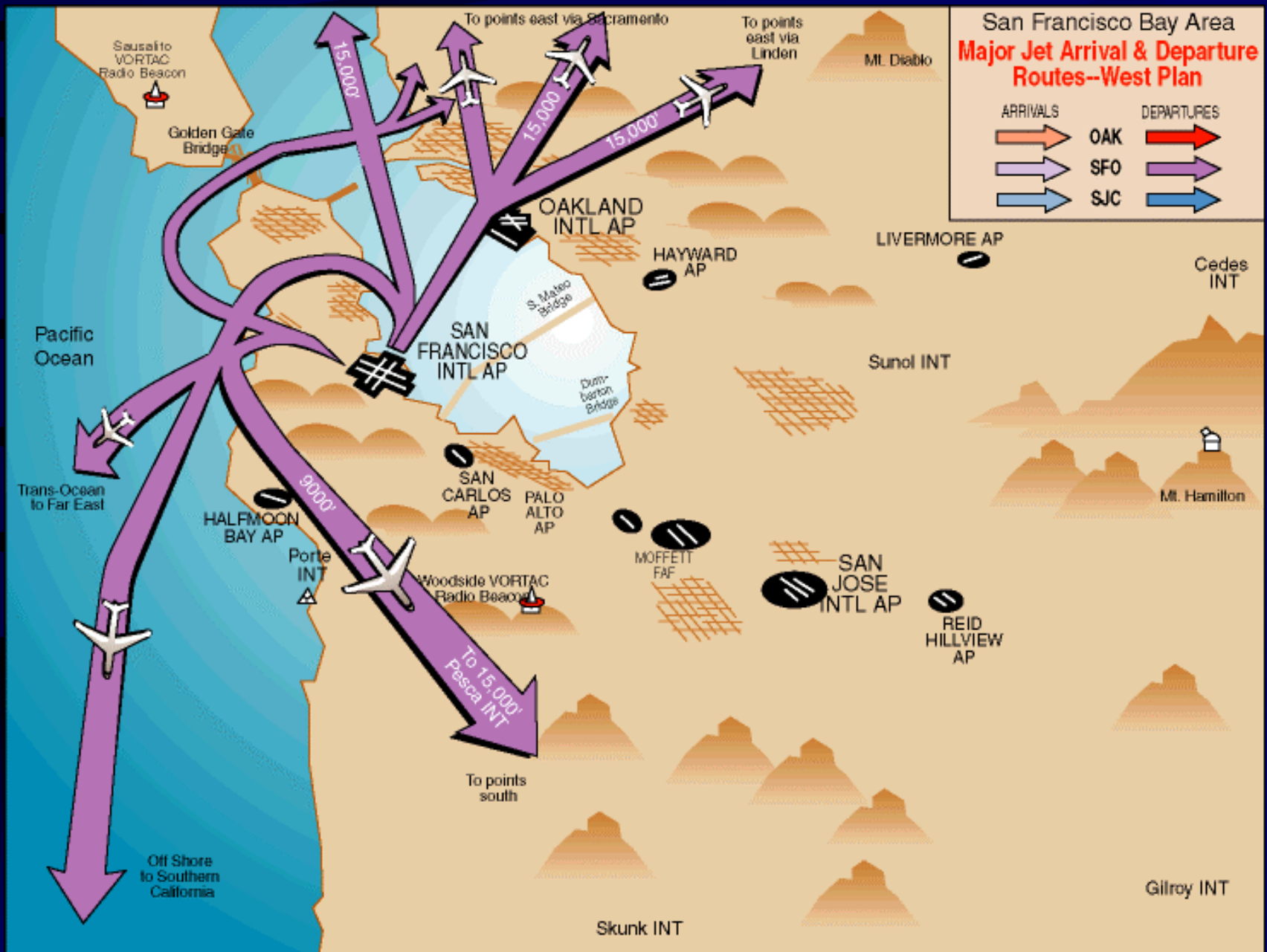


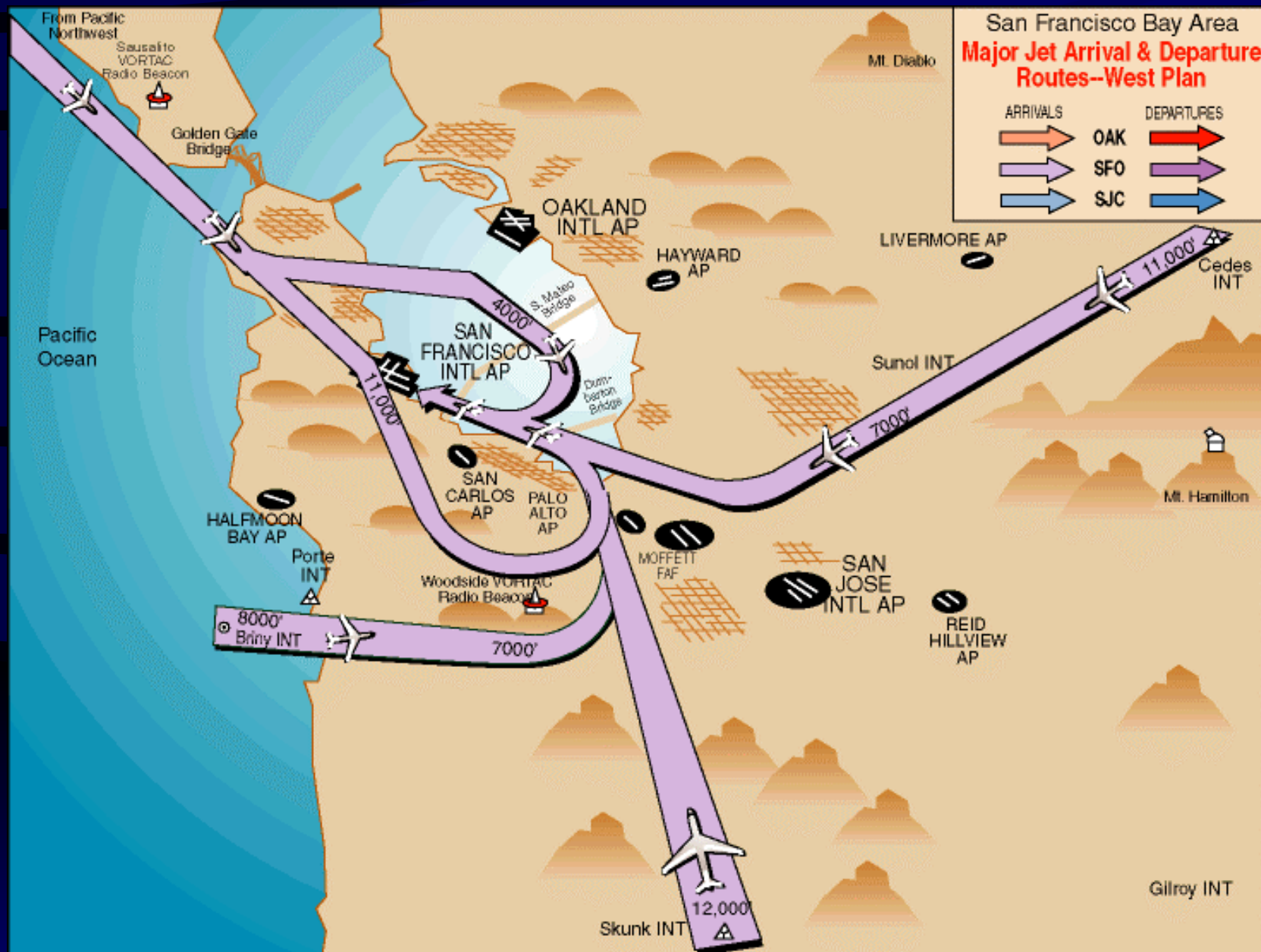
Cafeteria Interior

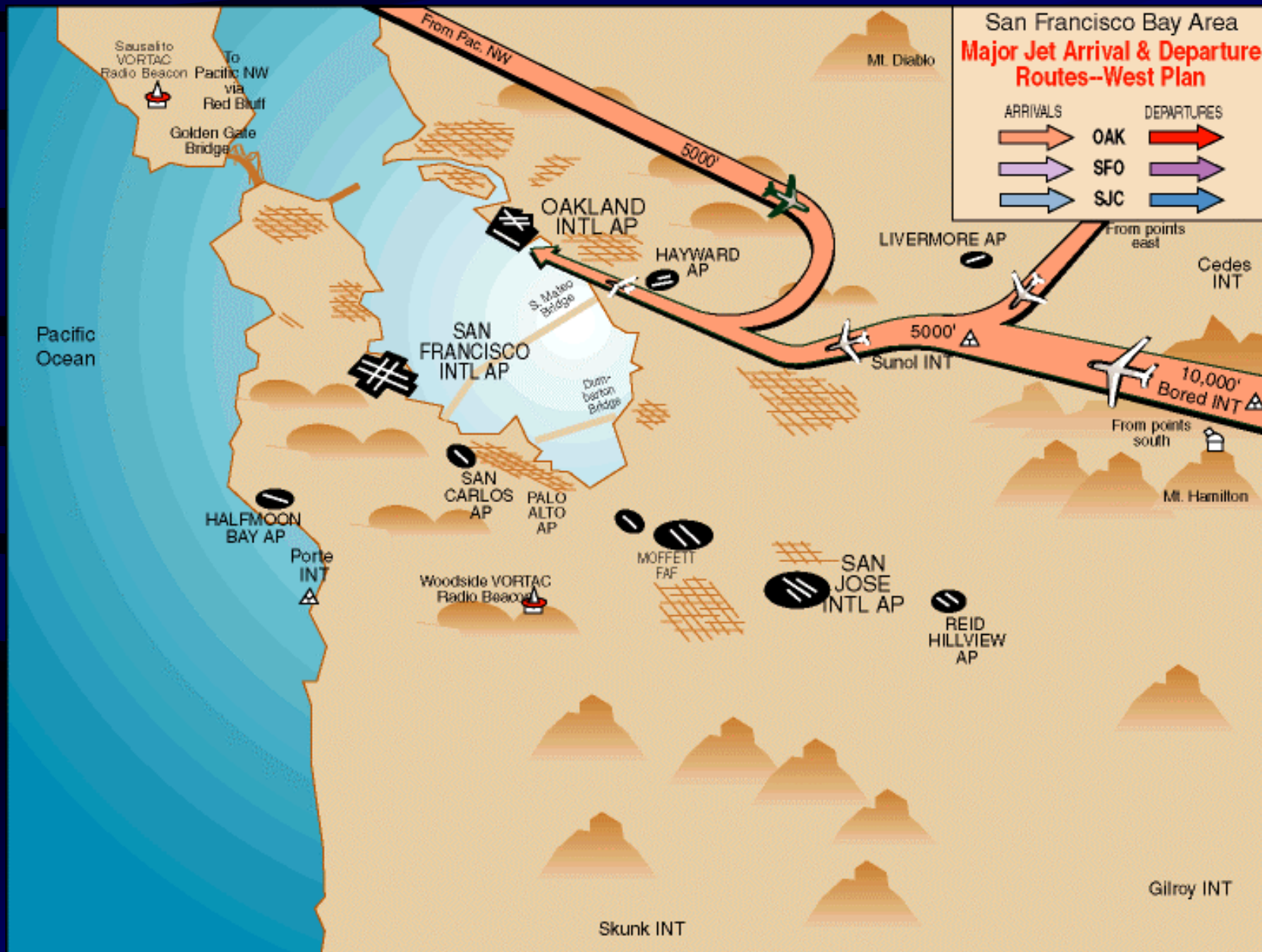


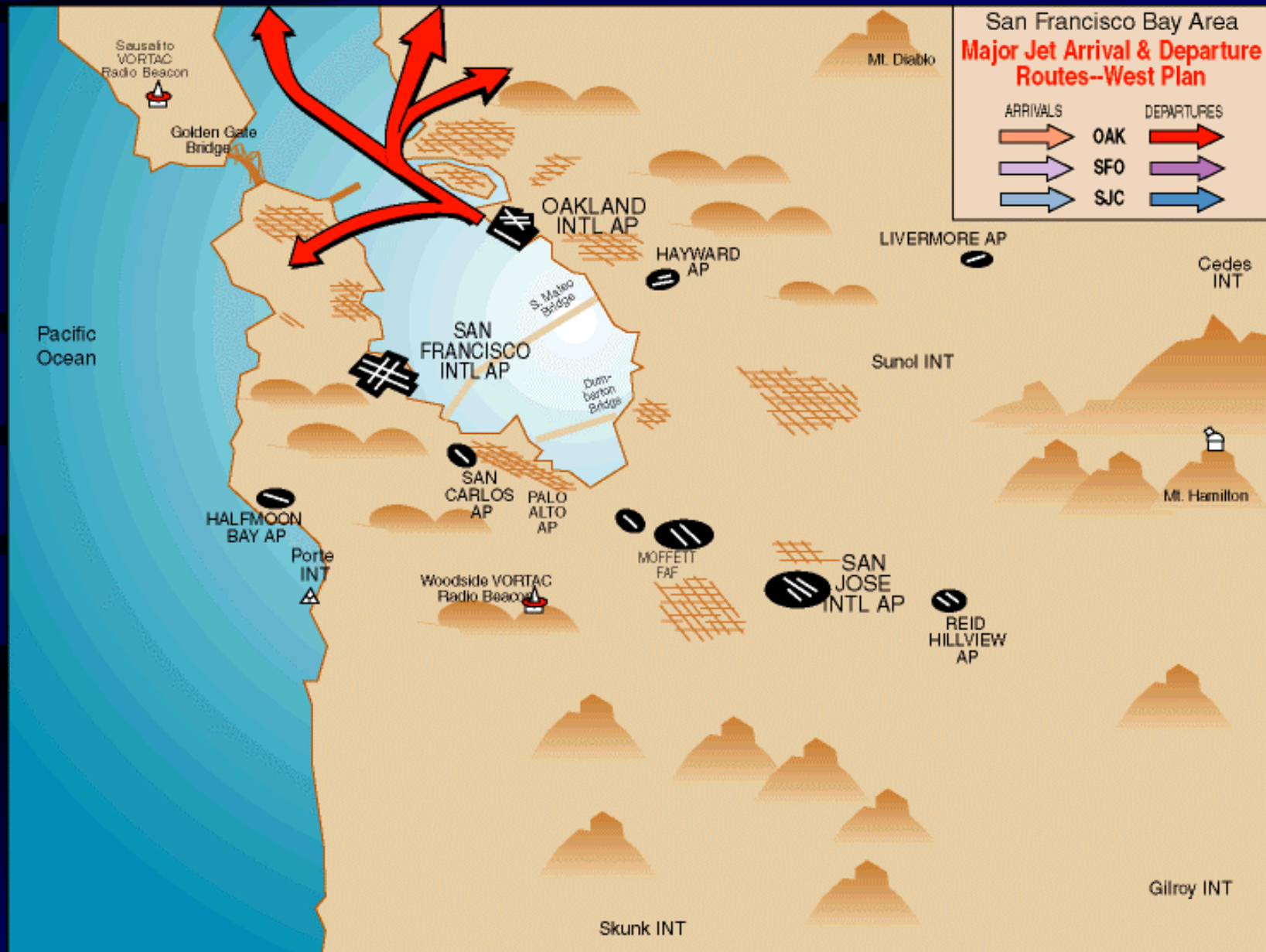
San Francisco Bay Area Major Jet Arrival & Departure Routes--West Plan

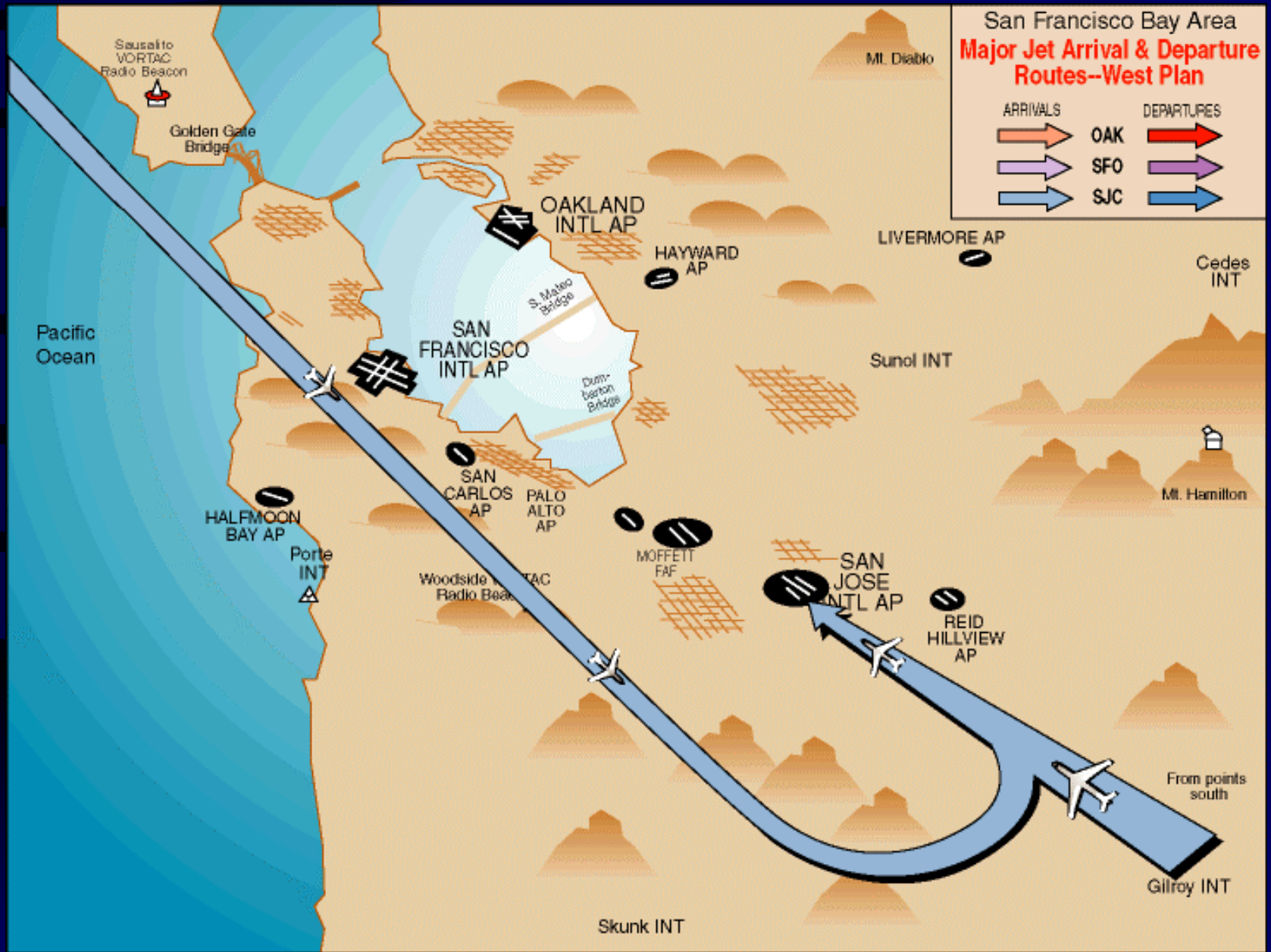
ARRIVALS	DEPARTURES
 OAK	
 SFO	
 SJC	











San Francisco Bay Area Major Jet Arrival & Departure Routes--West Plan

ARRIVALS



DEPARTURES



OAK

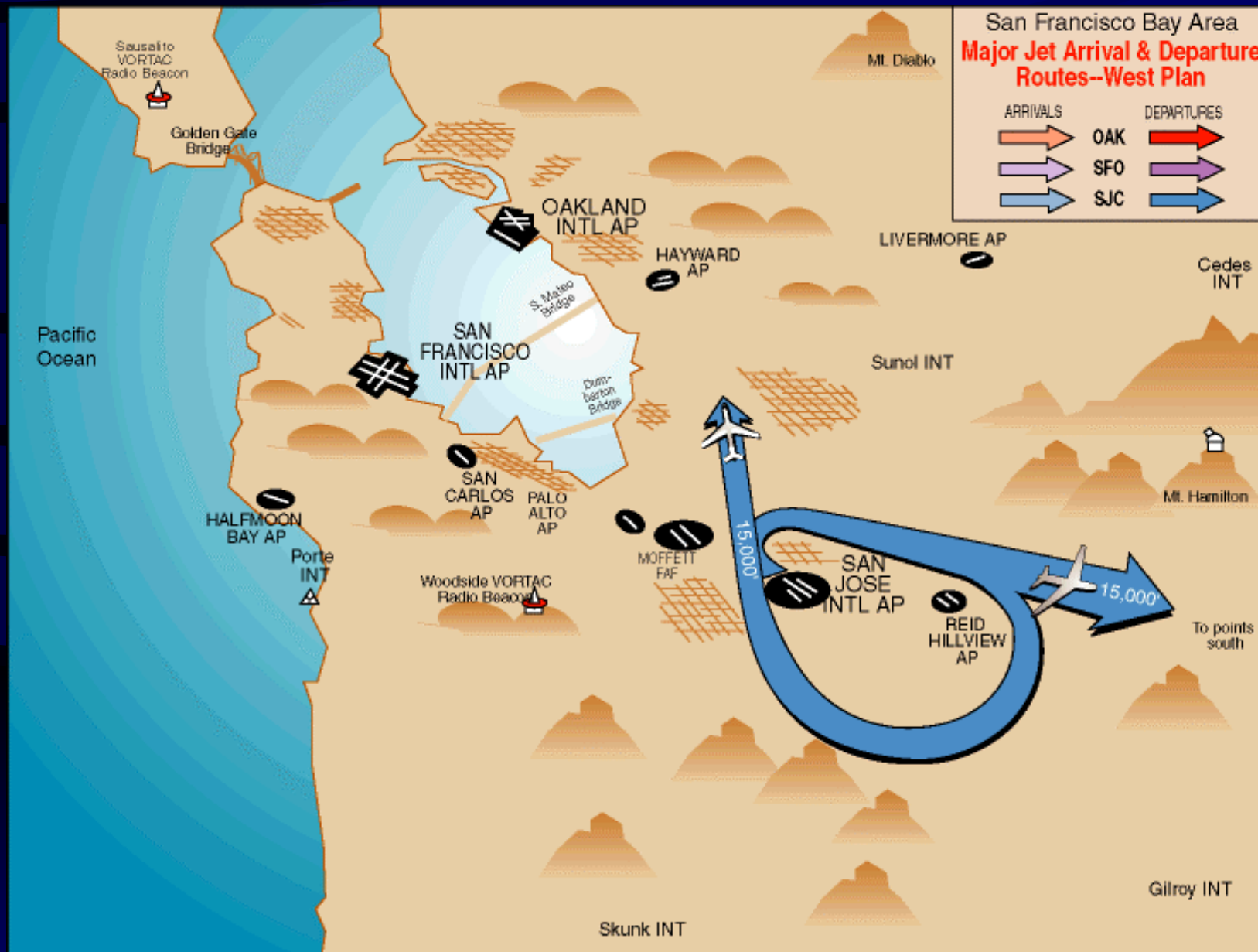
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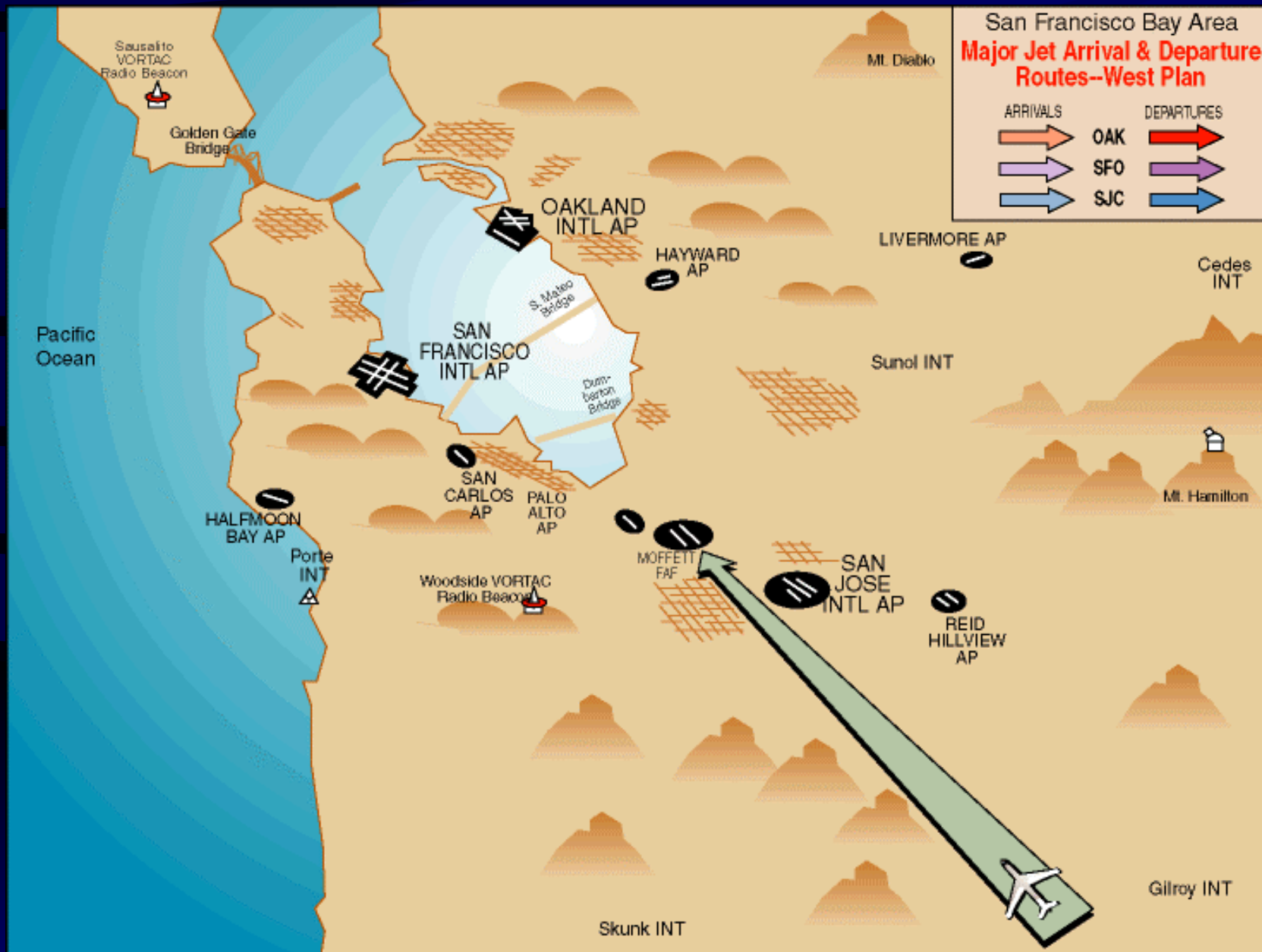
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